

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
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Work Order ID 149817

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Item ID: D2646PHI Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Cap
Start Date: 7/15/2016 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 8/3/2016 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
155	Spray Painting per QSI005 4.2	0.00				11			<i>[Signature]</i> 17-01-08
155									
SprayPaint	Memo	0.00							
Spray Painting	1- PRIME INSIDE AND OUT AS PER DWG AND QSI 005 4.2.1.3.3 PRIMER PRC DESOTO 515X349 BATCH: <u>135929</u>								
	2- PAINT BLACK AS PER DWG AND QSI 005 4.2.2 USING CA8213/F3738 CAMOFLAGE BLACK PAINT BATCH: <u>135331</u>								
165	QC14- Inspect Spray Paint	0.00				11			<i>[Stamp]</i> JAN 09 2017
165									
QC	Memo	0.00							
Quality Control									
180	Small Fab	0.00							
180									
Small Fab	Memo	0.06							
Small Fab	Install inserts as per Dwg D2646								<i>[Signature]</i> 12/06/16

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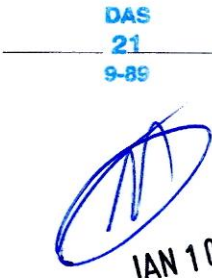
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.04							 DAS 34 98
200 *200* Packaging Packaging	Identify as per dwg & Stock Location <u>FP-001</u> Memo LOCATION : FP001	0.00 0.02							
210 *210* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.20							 DAS 21 9-89 JAN 10 2017

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Picklist Print

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Parent Item: D2646PHI

D2646PHI

Parent Item Name: Aft Cap

Start Date: 7/15/2016

Required Date: 8/3/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: G05.08.22Hole size revised in Step 5KJ/JLM
IPP Rev:H Changed Inserts 07-02-19 JLM
IPP rev I changed inserts 07.06.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-130	AELS8-1032-130	Purchased	No			110	Each	1,237.000	2	24			
AI S7-1032-130									**				
Rivnut													

* ALS4-1032-130 / M135442

22
17/06/16

Location	Loc Qty	Loc Code
FG	50	
M128649	50	
FP001	38	
M128649	38	
st549	1149	
M128649	1149	

D2646P

Purchased No

180 Each 0.0000 1

D2646P

Aft Cap

**

12
2x 8/16-9-12

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



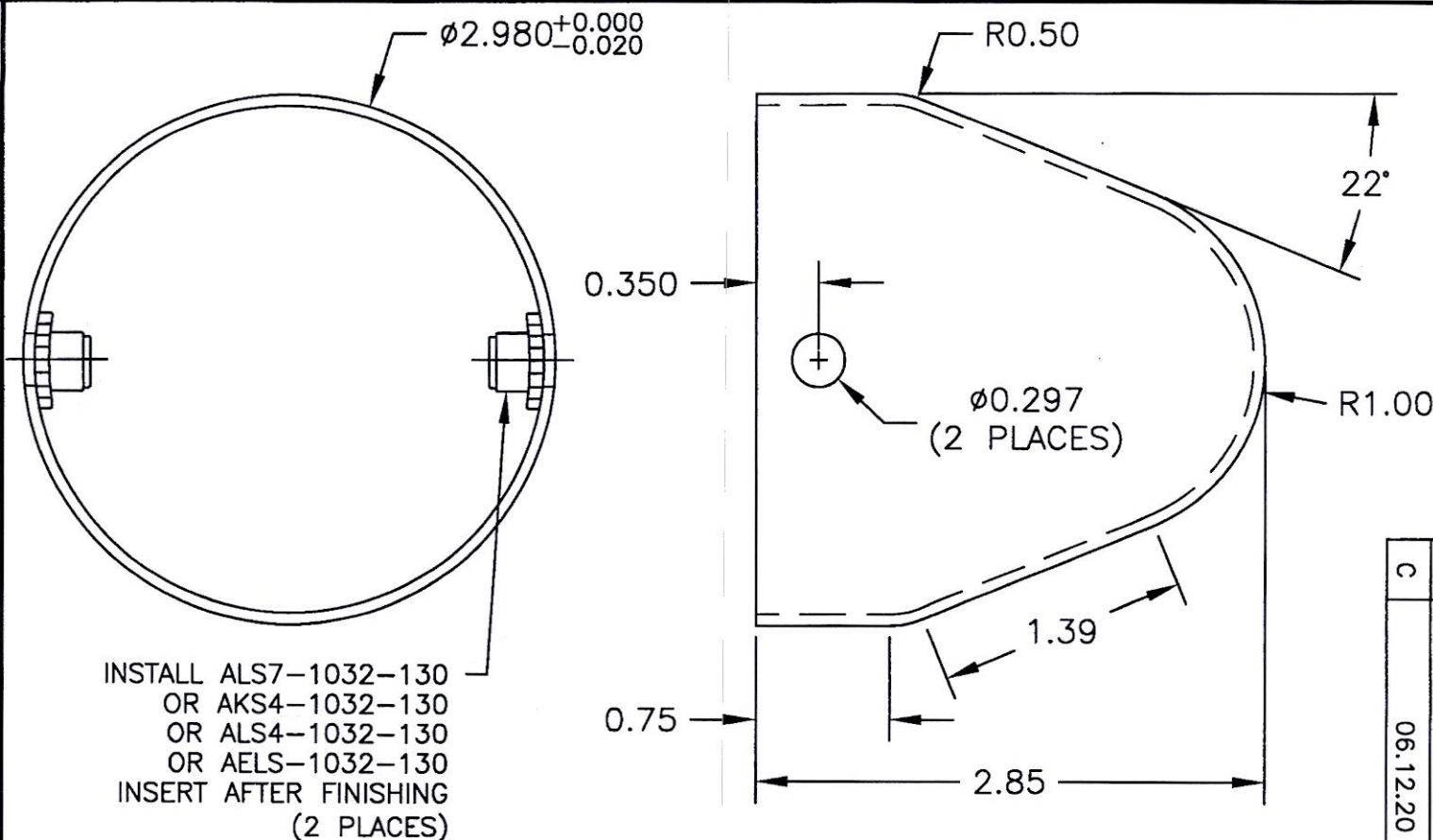
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

DART

DESIGN	DS	DRAWN BY	DART AEROSPACE USA, INC.
CHECKED		APPROVED	PORT HADLOCK, WA
DATE	06.12.20		DRAWING NO. D2646
			TITLE AFT CAP
A	97.03.25		NEW ISSUE
B	05.04.01		CHANGE TO CLOSED INSERTS
C	06.12.20		CHANGE TO OPEN ENDED INSERTS
			SCALE 1:1



D2646 AFT CAP

- 1) MATERIAL: ALUMINUM 1100-0 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 149817 M05
1608-03

RELEASED
07.02.12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33216**

Purchase Order Date 8/3/2016 10:55:55 AM
PO Print Date 8/4/2016

Page Number 1 of 2

Order From :

VC-SIE001

Ship To : DART AEROSPACE LTD

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

AUG 04 2016

Contact Name

Vendor Phone

604 530 7455

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						

1	D2646P	Aft Cap	8/22/2016		50.00	\$6.70	\$335.00
			Yes		Each		
			8/22/2016				

AS PER DWG D2646 REV. C

B149748 x 38 PCS PAINT WHITE

B149817 X 12 PCS PAINT BLACK FOR ***PHI***

8/6 9-12

Line Total:

\$335.00

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/22/2016		1.00	\$0.00	\$0.00
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No

Procurement Quality Clauses

8/22/2016

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

Note:

8/4/2016



Sieg's Manufacturing Ltd.

Quality Metal Spinning and Metal Fabricating
6236 205 Street, Langley, B.C. Canada
Ph: (604) 530-7455 Email: accounts@siegsmfg.com
www.siegsmfg.com

Packing Slip

Packing Slip No.: 47317
Date: 09/08/2016
Page: 1

Sold to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		Ship to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	
Order No.: 33216		Sold By: LOWEY, ARLA	
Shipped By:		Ship Date: 09/08/2016	
Tracking No.:			

Item No.	Unit	Description	Quantity	Backorder quantity
D2646P ✓	Each	Aft Cap ✓	50 PX	
5016-9-12.				
Comment:				



Sieg's Manufacturing Ltd.

6236 205 Street Langley, B.C. Canada V2Y 1N7

Ph#: (604)530-7455 fax#: (604)530-7490

arlalowey@siegsmfg.com

INSPECTION REPORT

Date: Sept 8, 2016

Customer: Dart Areospace

Packing Slip: 47317

Part#:	Quantity	Material	Check holes	Insp. By.
D2646	50	14g 1100	N/a	AL

Notes:

Material Certification Attached: YES



Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 11B224 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales

6156 PO No: 5400200310-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

Coil Ref. No.	1	2	3	4	5						
Tensile Strength KSI	14.10	14.06	14.04	14.06	14.14						
Yield Strength KSI	5.29	5.14	5.07	5.07	4.93						
% Elong. in 2 in.	30.80	30.40	30.70	31.30	32.30						
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Remarks: Tested By: RJD

Certified Date: 21 Nov 2013

Certified By
Lab Manager

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

CP 10/4/13

For testing, November 21, 2013

Melted/Manufactured in USA

QF 824-1-1

Page 1 of 1

From: Copper and Brass Sales CA

Cust: SIEGS MANUFACTURING LTD.

Del.: 2402875712

CstOr

1514

Wgt.: 1,109.542 LB

Date 12/19/2013

John R. Zambetti

A company
of ThyssenKrupp
Services

ThyssenKrupp Materials NA Inc.

ThyssenKrupp Materials NA
Copper and Brass Sales Division
19044 95A Avenue
SURREY BC V4N 4P4
Tel.: +16048823493 Fax: +16048820686



Order number	Ord-pos	Del-pos	Part description
Customer PO	PO date	Quantity	Customer Part
MTR header	MTR type	Search criteria	Heat lot
			Sample number
C8A/1401788868	000020	900001	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	74 ST	
Att_001.PDF	NCAP	930230267220130003	11A711
C8A/1401788868	000020	900002	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	26 ST	
Att_002.PDF	NCAP	930235185120130004	11B224

Delivery number
2402875712
Date
12/19/2013

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA

Skana Aluminum Company

Rolling Mill - Certified Metal

Certification of Properties and Analysis

Physical test: **11A711** Aluminum Alloy: **1100** Temper: **-O-** Thickness: **.0630**

Tested For: **Copper and Brass Sales** **6156** PO No: **5400197413-R01**

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

1	13.28	4.34	31.80	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

2	13.38	4.25	31.90	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

3	13.44	4.46	32.70	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

4	13.55	4.68	31.40	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

5	13.31	4.47	30.30	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

Remarks: Tested By: **RJD**

Certified Date: **10 Oct 2013**

Certified By:
Lab Manager

Kenna Hampton

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

9/16/13

Thursday, October 10, 2013

Melted/Manufactured in USA QF 824-1-2

Page 1 of 2

From: Copper and Brass Sales CA

Dest: SIEGS MANUFACTURING LTD.

CstAc

Wgt.: 3,157.927 LB

Del.: 2402875712

CstOr 1514

Date 12/19/2013

John R. Zambetti